

Notice of Allowability

Application No.

10/781,722

Examiner

Prabodh M. Dharja

Applicant(s)

HONDA ET AL.

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09-17-2007.
2. ☒ The allowed claim(s) is/are 1-16 and 18-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

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1. **Status:** Please all the replies and correspondence should be addressed to Examiner's new art unit 2629. Receipt is acknowledged of papers submitted on 09-17-2007 under amendments, which have been placed of record in the file. Applicant's representative has authorized examiner to do examiner amendments during telephone interview on 10-23-2007 to add claim limitations of the claim 17 to independent claim 16, cancel claim 17 and change dependency of claim 18 from cancelled claim 17 to independent claim 16. Therefore Claims 1-16 and 18-20 are pending and claim 17 has been cancelled in this action.

Response to Amendment

2. The amendment filed 09-17-2007 does not introduces any new matter into the disclosure. The added material is supported by the original disclosure.

3. Applicant has amended claims 1 and 16 to overcome prior art rejection. However, applicant has agreed and authorized examiner to do examiner amendments by adding claim limitations of the claim 17 to independent claim 16 to overcome newly cited prior art of Uehara et al. (US 5,663,772). Applicant's arguments, see Remark, filed 09-17-2007, with respect to Claims 1 and 16 regarding "a multi-grayscale component for deriving multi-grayscale pixel data by adding each different offset value to the pixel data corresponding to a display line and in said sub-subfields respectively performing, a lighting mode setting or an extinction mode setting to each of the pixel cells for a different one of the display line groups, based on the multi-grayscale pixel data with respect to each of the pixel cells belonging to the corresponding display line group in said M sub-subfields, and a light emission sustaining component for weighting said display line groups with different brightness values, respectively" have been fully considered,

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extensively searched in prior art as well as PUPUB and are persuasive as they do overcome prior art rejection; which puts application number 10781722 in condition for allowance.

Response to Arguments

4. Applicant's arguments, see remark, filed on 09-17-2007, with respect to objection to under 35 U.S.C. 132(a) regarding introducing new matter into the disclosure have been fully considered and are persuasive. The objection of Claim 1 has been withdrawn.

EXAMINER'S AMENDMENT

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a personal telephone interview with applicant's representative Andrew J. Taska on 10--23-2007.

The application has been amended as follows:

In the Claims

Claim 16 is amended as following.

Claims 16 (amended): A display panel drive for tone-driving, responding to pixel data based on a video signal, a display panel in which pixel cells each carrying a pixel for a plurality of display lines are arranged, the display panel drive comprising:

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a multi-grayscale component for deriving multi-grayscale pixel data by adding each different offset value to the pixel data each corresponding to a display group including $[M \cdot (k-1) + 1]$ th display lines (where M is a natural number and K is a natural number of n/M or smaller) of the display panel, a display line group including $[M \cdot (k-1) + 2]$ th display lines thereof, a display line group including $[M \cdot (k-1) + 3]$ th display lines thereof, ... and a display line group including $[M \cdot (k-1) + M]$ th display lines thereof; and

a light emission driving component for emitting the pixel cells depending on the multi-grayscale pixel data by assigning a different weighting in intensity to each of the display line groups; and

wherein the light emission driving component includes:

an address component for performing, based on the multi-grayscale pixel data, a lighting mode setting or an extinction mode setting with respect to each of the pixel cells on a display line group basis; and

a sustain component for emitting only the pixel cells in the lighting mode over a predetermined period every time the setting to the display line groups is done.

Claim 17 is amended as following.

Claim 17 is cancelled.

Claim 18 is amended as following.

Claim 18, Line 1, after word "claim" delete number "17" and insert number "16"

Allowable Subject Matter

6. Claims 1-16 and 18-20 are allowed.

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7. The following is an examiner's statement of reasons for allowance:

Applicant has amended claims 1 and 16 to overcome prior art rejection. However, applicant has agreed and authorized examiner to do examiner amendments by adding claim limitations of the claim 17 to independent claim 16 to overcome newly cited prior art of Uehara et al. (US 5,663,772). Applicant's argument filed on 09-17-2007; are convincing. As argued by applicant in remarks under claim rejection page 11, last two paragraphs, page 13, paragraph 2, page 14, paragraph 2, and page 16, first and last paragraphs, the prior art of Suzuki (US 2003/0006994 A1), Tokunaga et al. (US 2002/0054000 A1), Uehara et al. (US 5,663,772); all of the prior art cited on 892's 1449's, searched in NPL and searched in PG PUB fails to recite or disclose the uniquely distinct features of the independent claims limitations below in combination with all the other limitations of independent claims recited:

a multi-grayscale component for deriving multi-grayscale pixel data by adding each different offset value to the pixel data corresponding to a display line and in said sub-subfields respectively performing, a lighting mode setting or an extinction mode setting to each of the pixel cells for a different one of the display line groups, based on the multi-grayscale pixel data with respect to each of the pixel cells belonging to the corresponding display line group in said M sub-subfields, and a light emission sustaining component for weighting said display line groups with different brightness values, respectively.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M Dharia whose telephone number is 571-272-7668.

The examiner can normally be reached on M-F 8AM to 5PM.

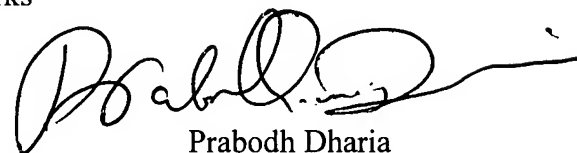
9. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231



Prabodh Dharia

Full Signatory Authority Program

AU2629

10-24-2007